



1 ATR Software Defined Sonobuoy Receiver (SDSR)

Versatile wideband acoustic receiver



Key features

- Up to 100 acoustic channels
- Dynamic range of >100 dB
- Supports future sonobuoy formats
- GPS buoy support
- Digital data rates to 320 kbps
- Automatic Identification System (AIS)
- Sonobuoy Positioning System (SPS)

Overview

The 1 ATR Software Defined Sonobuoy Receiver (SDSR) system is a highly sensitive ruggedized VHF signal receiver. This receiver system is designed to meet environmental requirements for advanced multi-mission aircraft (MMA). This SDSR is capable of receiving any mix of passive and active sonobuoy VHF signals concurrently for up to 100 independently selectable RF channels. Our SDSR supports all current NATO sonobuoy formats including GPS buoys. Another key feature of the 1 ATR sonobuoy receiver is the incorporation of Radio Frequency Interference Mitigation techniques. The Acoustic Receiver System can adaptively filter and spatially steer the antenna patterns to mitigate the effects of undesired VHF interference.

+ 1 ATR Sonobuoy Receiver Specifications

Ordering Information

7519-0500-001 — VIPR SDSR
 6449-0500-002 — SDSR Quad Ant
 6229-0500-001 — SDSR Single Ant

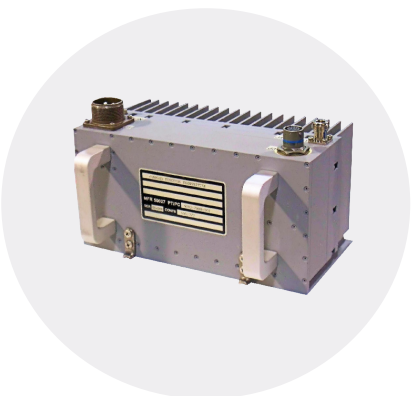


Mission Critical Accessories

Quad External Preamplifier (QEP)
 Part No. 5798-8000-001



Command Function Transmitter (CFT)
 Part No. 5982-7000-002



Performance

Channels Up to 100 Channels
 Dynamic Range >100 dB
 FM Sensitivity 12 dB at -113 dBm (25 kHz bandwidth)
 Digital Data Rate Multiple / Selectable (At time of order)
 Audio Distortion ≤ 0.2% at 100 Hz
 >140 dB out-of-band rejection
 Frequency Response Flat within 1 dB (0.5 Hz - 20 kHz)
 Antenna Support 1 or 4

Physical Specifications

General Physical Description 1 ATR
 Dimensions - Receiver 10.60H x 11.54W x 17.84D (in)
 26.93H x 29.31W x 45.31D (cm)
 Dimensions - Preamplifier 8.81H x 10.50W x 5.60D (in)
 22.38H x 26.67W x 14.23D (cm)
 Weight - Receiver 55 lbs / 24.95 kg
 Weight - Preamplifier 10 lbs / 4.54 kg^A
 Housing Color Grey or Custom

Input & Control

Power Input 115 VAC 400 Hz Power
 Control Ethernet (Primary) - 1 Gbps
 1553 Data Bus (SPS)

Environmental

Operating Temperature 0°C to 45°C
 Cooling Requirements Self-cooled (Fan)
 Operating Humidity 6% to 95% Non-condensing
 Vibration MIL-STD-810F Compliant
 Shock MIL-STD-810F Compliant
 Safety Standard MIL-STD-810F Compliant

A- Weight varies by configuration